

Attorney Docket No.: WON-0003
Inventors: Kwak et al.
Serial No.: 10/519,511
Filing Date: February 16, 2005
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This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of the Claims:

Claim 1 (currently amended): A method for high throughput screening of plant growth regulators comprising the steps of:

(a) culturing photomixotrophic cells in a microwell plate to which candidates for plant growth regulators were added; ~~and measuring cell growth on a large scale at the same time~~

(b) adding 2,3,5-triphenyltetrazolium chlorolide;

(c) removing solutions from the microwell plate and reacting the solutions with ethanol;

(d) transferring the reacted solutions of step (c) into a new microwell plate; and

(e) measuring optical density of the microwell plate of step (d) with a high throughput screening reader.

Claim 2 (original) The method as set forth in claim 1, wherein the photomixotrophic cells are *Marchantia polymorpha* L. photomixotrophic cells or *Nicotiana tabacum* cv. BY4 photomixotrophic cells.

Claim 3 (original): The method as set forth in claim 1, wherein the candidates for plant growth regulators are selected from a group consisting of synthetic compounds, natural compounds, plant extracts and fractions or extracts containing microorganism culture solutions.

Claim 4 -6 (canceled)

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Claim 7 (currently amended) The method as set forth in ~~claim 6~~ claim 1, wherein ~~the step 3~~ step (b) is carried out by treating 2,3,5-triphenyltetrazolium chlorolide for 4.5-5.5 hours, removing solutions from microwells, adding 95% ethanol thereto, and then reacting thereof at 60°C for 1 hour.

Claim 8 (new): The method of claim 1, wherein step (c) is carried out by removing solutions from microwells, adding 95% ethanol thereto, and then reacting thereof at 60°C for 1 hour.

Claim 9 (new): The method of claim 1, wherein the optical density of step (e) is measured at 490 nm.